

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

ST. ISIDORE RESEARCH, LLC,

Plaintiff,

v.

COMERICA INCORPORATED, et al.,

Defendants.

Case No. 2:15-cv-1390-JRG-RSP
LEAD CASE

MEMORANDUM OPINION AND ORDER

Before the Court is the opening claim construction brief of St. Isidore Research, LLC (“Plaintiff”) (Dkt. No. 148, filed on May 31, 2016),¹ the response of ZB, N.A. (f/k/a Amegy Bank, N.A.), LegacyTexas Bank, Southside Bancshares, Inc., Southside Bank, Texas Capital Bank, N.A., and Texas Capital Bancshares, Inc. (collectively, “Defendants”) (Dkt. No. 156, filed on June 21, 2016), and the reply of Plaintiff (Dkt. No. 158, filed on June 29, 2016). The Court held a claim construction hearing on July 14, 2016. Having considered the arguments and evidence presented by the parties at the hearing and in their briefing, the Court issues this Order.

¹ Citations to the parties’ filings are to the filing’s number in the docket (Dkt. No.) and pin cites are to the page numbers assigned through ECF.

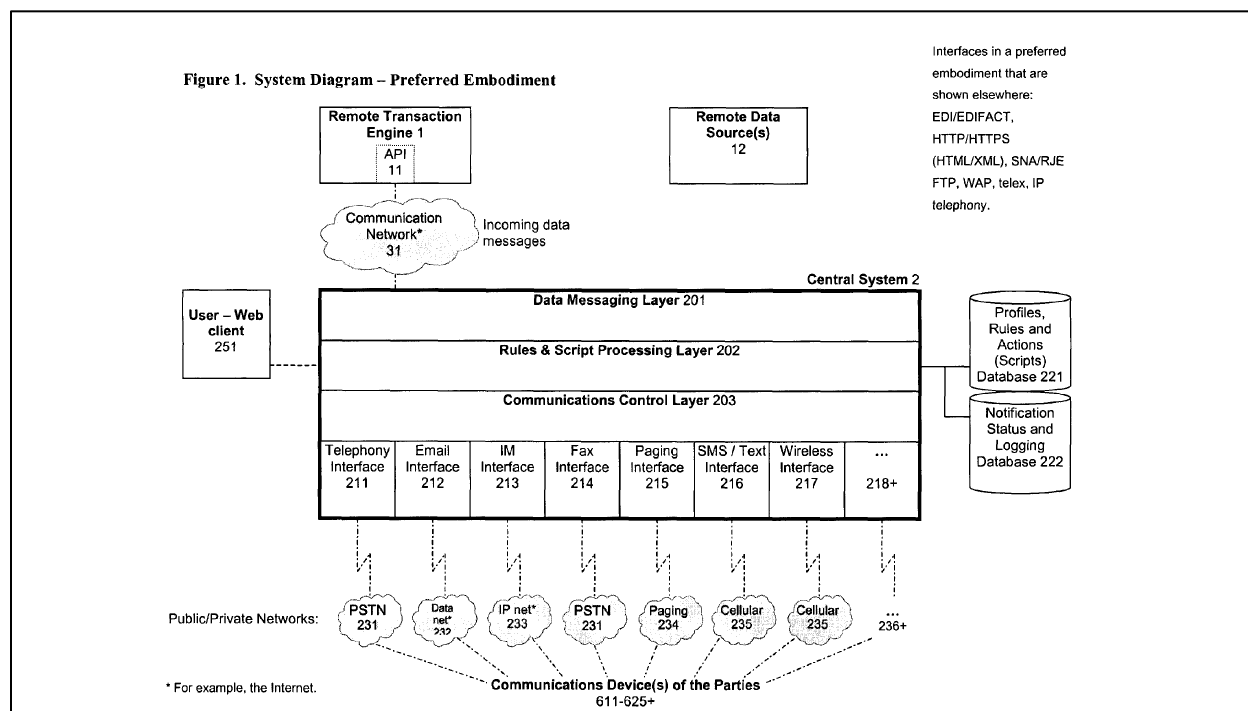
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I. BACKGROUND

Plaintiff alleges infringement of U.S. Patent No. 7,904,360 (the “’360 Patent”) and U.S. Patent No. 8,589,271 (the “’271 Patent”) (collectively, the “Asserted Patents”). The ’360 Patent is entitled “System and Method For Verification, Authentication, and Notification of a Transaction.” The application leading to the ’360 Patent was filed on January 30, 2003 and the patent issued on March 8, 2011. The ’271 Patent is entitled “System and Method For Verification, Authentication, and Notification of Transactions.” The application leading to the ’271 Patent was filed on February 3, 2012 and the patent issued on November 19, 2013. Both Asserted Patents claim priority to an application filed on February 4, 2002.

In general, the Asserted Patents are directed to technology for monitoring and approving certain transactions, such as e-commerce transactions and system-access transactions. Figure 1 of the ’360 Patent summarizes many aspects of the patent. Figure 1 describes a system (Central System 2) that receives information about the transaction from a transaction server (Remote



Transaction Engine 1), such as a e-commerce server, and solicits confirmation for, or provides notice of, the transaction from or to interested parties via one or more communication links, such as telephony over the Public Switched Telephone Network (231), e-mail over the Internet (232), and text messaging over a cellular network (235).

The abstract of the '360 Patent provides:

A system and method for verifying, authenticating, and providing notification of a transaction, such as a commercial or financial transaction, with and/or to at least one party identified as engaging in the transaction and/or identified as having a potential interest in the transaction. A central system accepts information regarding a transaction, including information about at least one party identified as engaging in the transaction, such as by a credit account number or Social Security number or merchant account number, and/or identified as having a potential interest in the transaction. Based on the information regarding the transaction and any supplemental information the central system determines, the central system communicates with and/or to at least one party and/or additional or alternative parties, via at least one communications device or system having a communications address, such as a telephone number or Short Message Service address, predetermined as belonging to the at least one party and/or additional or alternative parties. Via said communications, at least one party identified as engaging in, or having an interest or a potential interest in, the transaction may be notified of it, and may further be enabled or required to supply additional verifying or authenticating information to the central system.

The abstract of the '271 Patent provides:

A system and method are provided for verifying, authenticating, and providing notification of a transaction such as a commercial or financial transaction, with and/or to at least one party identified as engaging in the transaction and/or identified as having a potential interest in the transaction or type of transaction.

Claim 1 of the '360 Patent and Claim 1 of the '271 Patent, exemplary system and method claims respectively, recite as follows:

<u>'360 Patent</u>	<u>'271 Patent</u>
<p>1. A computer-implemented system for providing a transaction, the system comprising:</p> <ul style="list-style-type: none"> a transaction processing module configured to process a transaction and to communicate via a first communications link and one or more second communications links, wherein the transaction processing module: receives, via the first communications link, incoming information associated with a transaction; identifies at least one party associated with the transaction, wherein the at least one party is authorized to verify the transaction and is a non-merchant with regards to the transaction; transmits, via the one or more second communications links, a verification request to the at least one party to verify the transaction, wherein the one or more second communications links are different from the first communications link; recognizes an occurrence of an event; determines authenticity of the transaction based on the recognition of the occurrence of the event; and continues processing the transaction initiated over the first communications link. 	<p>1. A method for authenticating a device to be associated with an account, the method comprising:</p> <ul style="list-style-type: none"> receiving at a server, over a network, an account access request from a first device; identifying a second device associated with the account; transmitting to the second device, over a network, a verification message associated with the account access request; receiving, over a network, a response related to the verification message; verifying, using a processor, the authenticity of the account access request based on the response; and authenticating the first device, such that one or more subsequent requests to access the account from the first device are granted without communicating with the second device.

II. LEGAL PRINCIPLES

A. Claim Construction

“It is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting *Innova/Pure Water Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). To determine the meaning of the claims, courts start by considering the intrinsic evidence. *Id.* at 1313; *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 861 (Fed. Cir. 2004); *Bell Atl. Network Servs., Inc. v. Covad Commc’ns Group, Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001). The intrinsic evidence includes the claims themselves, the specification, and the prosecution history. *Phillips*, 415 F.3d at 1314; *C.R. Bard, Inc.*, 388 F.3d at 861. The general rule—subject to certain specific exceptions discussed *infra*—is that each claim term is construed according to its ordinary and accustomed meaning as understood by one of

ordinary skill in the art at the time of the invention in the context of the patent. *Phillips*, 415 F.3d at 1312–13; *Alloc, Inc. v. Int’l Trade Comm’n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003); *Azure Networks, LLC v. CSR PLC*, 771 F.3d 1336, 1347 (Fed. Cir. 2014) (“There is a heavy presumption that claim terms carry their accustomed meaning in the relevant community at the relevant time.”) (vacated on other grounds).

“The claim construction inquiry. . . begins and ends in all cases with the actual words of the claim.” *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1248 (Fed. Cir. 1998). “[I]n all aspects of claim construction, ‘the name of the game is the claim.’” *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1298 (Fed. Cir. 2014) (quoting *In re Hiniker Co.*, 150 F.3d 1362, 1369 (Fed. Cir. 1998)). First, a term’s context in the asserted claim can be instructive. *Phillips*, 415 F.3d at 1314. Other asserted or unasserted claims can also aid in determining the claim’s meaning, because claim terms are typically used consistently throughout the patent. *Id.* Differences among the claim terms can also assist in understanding a term’s meaning. *Id.* For example, when a dependent claim adds a limitation to an independent claim, it is presumed that the independent claim does not include the limitation. *Id.* at 1314–15.

“[C]laims ‘must be read in view of the specification, of which they are a part.’” *Id.* (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc)). “[T]he specification ‘is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.’” *Id.* (quoting *Vitronics Corp. v. Conceptiontronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)); *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). But, “[a]lthough the specification may aid the court in interpreting the meaning of disputed claim language, particular embodiments and examples appearing in the specification will not generally be read into the claims.” *Comark*

Commc'ns, Inc. v. Harris Corp., 156 F.3d 1182, 1187 (Fed. Cir. 1998) (quoting *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988)); *see also Phillips*, 415 F.3d at 1323. “[I]t is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited.” *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004).

The prosecution history is another tool to supply the proper context for claim construction because, like the specification, the prosecution history provides evidence of how the U.S. Patent and Trademark Office (“PTO”) and the inventor understood the patent. *Phillips*, 415 F.3d at 1317. However, “because the prosecution history represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation, it often lacks the clarity of the specification and thus is less useful for claim construction purposes.” *Id.* at 1318; *see also Athletic Alternatives, Inc. v. Prince Mfg.*, 73 F.3d 1573, 1580 (Fed. Cir. 1996) (ambiguous prosecution history may be “unhelpful as an interpretive resource”).

Although extrinsic evidence can also be useful, it is “less significant than the intrinsic record in determining the legally operative meaning of claim language.” *Phillips*, 415 F.3d at 1317 (quoting *C.R. Bard, Inc.*, 388 F.3d at 862). Technical dictionaries and treatises may help a court understand the underlying technology and the manner in which one skilled in the art might use claim terms, but technical dictionaries and treatises may provide definitions that are too broad or may not be indicative of how the term is used in the patent. *Id.* at 1318. Similarly, expert testimony may aid a court in understanding the underlying technology and determining the particular meaning of a term in the pertinent field, but an expert’s conclusory, unsupported assertions as to a term’s definition are entirely unhelpful to a court. *Id.* Generally, extrinsic

evidence is “less reliable than the patent and its prosecution history in determining how to read claim terms.” *Id.* The Supreme Court recently explained the role of extrinsic evidence in claim construction:

In some cases, however, the district court will need to look beyond the patent’s intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period. *See, e.g., Seymour v. Osborne*, 11 Wall. 516, 546 (1871) (a patent may be “so interspersed with technical terms and terms of art that the testimony of scientific witnesses is indispensable to a correct understanding of its meaning”). In cases where those subsidiary facts are in dispute, courts will need to make subsidiary factual findings about that extrinsic evidence. These are the “evidentiary underpinnings” of claim construction that we discussed in *Markman*, and this subsidiary factfinding must be reviewed for clear error on appeal.

Teva Pharm. USA, Inc. v. Sandoz, Inc., 135 S. Ct. 831, 841 (2015).

B. Departing from the Ordinary Meaning of a Claim Term

There are “only two exceptions to [the] general rule” that claim terms are construed according to their plain and ordinary meaning: “1) when a patentee sets out a definition and acts as his own lexicographer, or 2) when the patentee disavows the full scope of the claim term either in the specification or during prosecution.”² *Golden Bridge Tech., Inc. v. Apple Inc.*, 758 F.3d 1362, 1365 (Fed. Cir. 2014) (quoting *Thorner v. Sony Comput. Entm’t Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012)); *see also GE Lighting Sols., LLC v. AgiLight, Inc.*, 750 F.3d 1304, 1309 (Fed. Cir. 2014) (“[T]he specification and prosecution history only compel departure from the plain meaning in two instances: lexicography and disavowal.”). The standards for finding lexicography or disavowal are “exacting.” *GE Lighting Sols.*, 750 F.3d at 1309.

² Some cases have characterized other principles of claim construction as “exceptions” to the general rule, such as the statutory requirement that a means-plus-function term is construed to cover the corresponding structure disclosed in the specification. *See, e.g., CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1367 (Fed. Cir. 2002).

To act as his own lexicographer, the patentee must “clearly set forth a definition of the disputed claim term,” and “clearly express an intent to define the term.” *Id.* (quoting *Thorner*, 669 F.3d at 1365); *see also Renishaw*, 158 F.3d at 1249. The patentee’s lexicography must appear “with reasonable clarity, deliberateness, and precision.” *Renishaw*, 158 F.3d at 1249.

To disavow or disclaim the full scope of a claim term, the patentee’s statements in the specification or prosecution history must amount to a “clear and unmistakable” surrender. *Cordis Corp. v. Boston Sci. Corp.*, 561 F.3d 1319, 1329 (Fed. Cir. 2009); *see also Thorner*, 669 F.3d at 1366 (“The patentee may demonstrate intent to deviate from the ordinary and accustomed meaning of a claim term by including in the specification expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope.”). “Where an applicant’s statements are amenable to multiple reasonable interpretations, they cannot be deemed clear and unmistakable.” *3M Innovative Props. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1326 (Fed. Cir. 2013).

C. Functional Claiming and 35 U.S.C. § 112, ¶ 6 (pre-AIA) / § 112(f) (AIA)³

A patent claim may be expressed using functional language. *See* 35 U.S.C. § 112, ¶ 6; *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1347–49 & n.3 (Fed. Cir. 2015) (en banc in relevant portion). Section 112, Paragraph 6, provides that a structure may be claimed as a “means . . . for performing a specified function” and that an act may be claimed as a “step for performing a specified function.” *Masco Corp. v. United States*, 303 F.3d 1316, 1326 (Fed. Cir. 2002).

But § 112, ¶ 6 does not apply to all functional claim language. There is a rebuttable presumption that § 112, ¶ 6 applies when the claim language includes “means” or “step for” terms, and that it does not apply in the absence of those terms. *Masco Corp.*, 303 F.3d at 1326;

³ Because the applications resulting in the Asserted Patents were filed before September 16, 2012, the effective date of the America Invents Act (“AIA”), the Court refers to the pre-AIA version of § 112.

Williamson, 792 F.3d at 1348. The presumption stands or falls according to whether one of ordinary skill in the art would understand the claim with the functional language, in the context of the entire specification, to denote sufficiently definite structure or acts for performing the function. *See Media Rights Techs., Inc. v. Capital One Fin. Corp.*, 800 F.3d 1366, 1372 (Fed. Cir. 2015) (§ 112, ¶ 6 does not apply when “the claim language, read in light of the specification, recites sufficiently definite structure” (quotation marks omitted) (citing *Williamson*, 792 F.3d at 1349; *Robert Bosch, LLC v. Snap-On Inc.*, 769 F.3d 1094, 1099 (Fed. Cir. 2014))); *Williamson*, 792 F.3d at 1349 (§ 112, ¶ 6 does not apply when “the words of the claim are understood by persons of ordinary skill in the art to have sufficiently definite meaning as the name for structure”); *Masco Corp.*, 303 F.3d at 1326 (§ 112, ¶ 6 does not apply when the claim includes an “act” corresponding to “how the function is performed”); *Personalized Media Communications, L.L.C. v. International Trade Commission*, 161 F.3d 696, 704 (Fed. Cir. 1998) (§ 112, ¶ 6 does not apply when the claim includes “sufficient structure, material, or acts within the claim itself to perform entirely the recited function . . . even if the claim uses the term ‘means.’” (quotation marks and citation omitted)).

When it applies, § 112, ¶ 6 limits the scope of the functional term “to only the structure, materials, or acts described in the specification as corresponding to the claimed function and equivalents thereof.” *Williamson*, 792 F.3d at 1347. Construing a means-plus-function limitation involves multiple steps. “The first step . . . is a determination of the function of the means-plus-function limitation.” *Medtronic, Inc. v. Advanced Cardiovascular Sys., Inc.*, 248 F.3d 1303, 1311 (Fed. Cir. 2001). “[T]he next step is to determine the corresponding structure disclosed in the specification and equivalents thereof.” *Id.* A “structure disclosed in the specification is ‘corresponding’ structure only if the specification or prosecution history clearly links or

associates that structure to the function recited in the claim.” *Id.* The focus of the “corresponding structure” inquiry is not merely whether a structure is capable of performing the recited function, but rather whether the corresponding structure is “clearly linked or associated with the [recited] function.” *Id.* The corresponding structure “must include all structure that actually performs the recited function.” *Default Proof Credit Card Sys. v. Home Depot U.S.A., Inc.*, 412 F.3d 1291, 1298 (Fed. Cir. 2005). However, § 112 does not permit “incorporation of structure from the written description beyond that necessary to perform the claimed function.” *Micro Chem., Inc. v. Great Plains Chem. Co.*, 194 F.3d 1250, 1258 (Fed. Cir. 1999).

For § 112, ¶ 6 limitations implemented by a programmed general purpose computer or microprocessor, the corresponding structure described in the patent specification must include an algorithm for performing the function. *WMS Gaming Inc. v. Int’l Game Tech.*, 184 F.3d 1339, 1349 (Fed. Cir. 1999). The corresponding structure is not a general purpose computer but rather the special purpose computer programmed to perform the disclosed algorithm. *Aristocrat Techs. Austl. Pty Ltd. v. Int’l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008).

D. Definiteness Under 35 U.S.C. § 112, ¶ 2 (pre-AIA) / § 112(b) (AIA)⁴

Patent claims must particularly point out and distinctly claim the subject matter regarded as the invention. 35 U.S.C. § 112, ¶ 2. A claim, when viewed in light of the intrinsic evidence, must “inform those skilled in the art about the scope of the invention with reasonable certainty.” *Nautilus Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2129 (2014). If it does not, the claim fails § 112, ¶ 2 and is therefore invalid as indefinite. *Id.* at 2124. Whether a claim is indefinite is determined from the perspective of one of ordinary skill in the art as of the time the application for the patent was filed. *Id.* at 2130. As it is a challenge to the validity of a patent, the failure of

⁴ Because the applications resulting in the Asserted Patents were filed before September 16, 2012, the Court refers to the pre-AIA version of § 112.

any claim in suit to comply with § 112 must be shown by clear and convincing evidence. *Id.* at 2130 n.10. “[I]ndefiniteness is a question of law and in effect part of claim construction.” *ePlus, Inc. v. Lawson Software, Inc.*, 700 F.3d 509, 517 (Fed. Cir. 2012).

When a term of degree is used in a claim, “the court must determine whether the patent provides some standard for measuring that degree.” *Biosig Instruments, Inc. v. Nautilus, Inc.*, 783 F.3d 1374, 1378 (Fed. Cir. 2015) (quotation marks omitted). Likewise, when a subjective term is used in a claim, “the court must determine whether the patent’s specification supplies some standard for measuring the scope of the [term].” *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1351 (Fed. Cir. 2005); *accord Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1371 (Fed. Cir. 2014) (citing *Datamize*, 417 F.3d at 1351).

In the context of a claim governed by 35 U.S.C. § 112, ¶ 6, the claim is invalid as indefinite if the claim fails to disclose adequate corresponding structure to perform the claimed functions. *Williamson*, 792 F.3d at 1351–52. The disclosure is inadequate when one of ordinary skill in the art “would be unable to recognize the structure in the specification and associate it with the corresponding function in the claim.” *Id.* at 1352.

III. AGREED CONSTRUCTIONS

The parties have agreed to the following construction set forth in their Joint Claim Construction Chart Pursuant to Local Patent Rule 4-5(d) (Dkt. No. 161).

Term ⁵	Agreed Construction
“communications link” <ul style="list-style-type: none">• ’360 Patent Claim 1, 32, 63	plain and ordinary meaning

⁵ For all term charts in this order, the claims in which the term is found are listed with the term but: (1) only the highest level claim in each dependency chain is listed, and (2) only asserted claims identified in the parties’ briefing or in their Joint Claim Construction Chart Pursuant to Local Patent Rule 4-5(d) (Dkt. No. 161) are listed.

Having reviewed the intrinsic and extrinsic evidence of record, the Court agrees with and adopts the parties’ agreed construction.

IV. CONSTRUCTION OF DISPUTED TERMS

A. “transaction”

Disputed Term	Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
“transaction” <ul style="list-style-type: none"> ’360 Patent Claims 1, 32, 63 	No construction needed / plain and ordinary meaning. Alternatively: <ul style="list-style-type: none"> “an exchange or interaction between two parties or devices” 	“an exchange of information between two parties that is distinct from logging into the system”

The Parties’ Positions

Plaintiff submits that “transaction” is used in the Asserted Patents according to its broad, customary, and readily accessible meaning and does not need to be rewritten. Dkt. No. 148 at 13. Plaintiff argues Defendants’ proposed construction excludes exemplary embodiments, such as an “authorization transaction (non-commercial in nature) regarding the entry by some party to a restricted or secured area or system.” *Id.* at 14 (quoting ’360 Patent col.28 ll.11–18). Specifically, Plaintiff argues “transaction” in the patents includes logging into a system. *Id.*

In addition to the claims, Plaintiff cites the following intrinsic and extrinsic evidence to support its position: **Intrinsic evidence:** ’360 Patent col.1 ll.23–24, col.2 ll.14–15, col.3 ll.35–37, col.6 ll.25–27, col.28 ll.11–18, figs.1, 3, 4, 11–24. **Extrinsic evidence:** Traynor Decl.⁶ ¶¶ 16–20 (Dkt. No. 148-1 at 6); Merriam-Webster Online Dictionary, “transaction,” (Plaintiff’s Ex. 3, Dkt. No. 148-5)⁷; Oxforddictionaries.com, “transaction,” (Plaintiff’s Ex. 4, Dkt. No. 148-6).⁸

⁶ Expert Declaration of Dr. Patrick Traynor.

⁷ <http://www.merriam-webster.com/dictionary/transaction>

⁸ http://www.oxforddictionaries.com/us/definition/american_english/transaction

Defendants respond that the '360 Patent distinguishes between transactions that are commercial and non-commercial exchanges of information and users logging into a system to perform such exchanges. Defendants assert the term needs to capture the distinction between these types of activities. Dkt. No. 156 at 12–13 (citing '360 Patent col.31 ll.10–31). Defendants further respond that the claims require the term to capture this distinction because Claim 1 states the system “continues processing the transaction” after the user logs in. Defendants suggest that if a user logging in comprises a completed “transaction,” then the transaction cannot “continue to be processed” after the log in is finished. *See id.* at 13. Defendants argue that Plaintiff’s reliance on the '360 Patent’s description of an “authorization transaction . . . regarding the entry by some party to a restricted or secure area” is misplaced. Defendants say that this description refers to accessing systems that are not the claimed system. *Id.* at 14. Defendants further submit that the patent teaches that information associated with logging into a system, namely, “passwords and ID codes,” are not used for commercial transactions. *Id.* (quoting '360 Patent col.6 ll.34–53).

In addition to the claims, Defendants cite the following **intrinsic evidence** to support their position: '360 Patent col.3 ll.35–37, col.6 ll.25–27, col.6 ll.34–53, col.28 ll.11–15, col.31 ll.10–31.

Plaintiff replies that that the ordinary meaning of “transaction” includes logging into a system and that the patents never redefined “transaction” to exclude this type of activity. Dkt. No. 158 at 5–6. Plaintiff argues that recognition in the patents that some prior-art technology did not use passwords or ID codes does not amount to excluding logging into a system from the meaning of “transaction.” *Id.* at 6.

Plaintiff cites further **intrinsic evidence** to support its position: '360 Patent col.6 ll.44–53.

Analysis

The issue here is whether “transaction” in the Asserted Patents excludes logging into the claimed system. The Court finds that the term “transaction” does not exclude logging into a system.

The Asserted Patents use the term “transaction” according to its ordinary sense. Ordinarily, the term denotes a purposeful interaction between parties or devices. For instance, the Asserted Patents describe transfers, purchases, payments, account openings, account closings, account modifications, entries into a restricted area, and entries into a restricted system as transactions. *See, e.g.*, ’360 Patent col.1 ll.14–20, col.2 ll.13–17, col.3 ll.34–37, col.28 ll.10–17. A trait that all of these interactions share is that in the interaction, one party has purposefully created the interaction by seeking something from or providing something to the other party, such as funds, goods, information, or access.

The term “transaction” in the Asserted Patents does not exclude logging into any system. There can be no dispute that the Asserted Patents teach that an “authorization transaction . . . regarding the entry by some party to a restricted . . . system” is a form of “transaction.” ’360 Patent col.28 ll.11–15. That statement in the specifications expressly contemplates that gaining access to a system, such as by logging into the system, is a “transaction.”

Defendants argue that this teaching is limited to only “emergency” situations. But the Court finds that argument unpersuasive. Defendants rightly point out that the specifications describe the “authorization transaction” in the context of an emergency situation. In the situation described in the specification, during an emergency, a request to authorize access to a system is sent repeatedly until it is answered. However, the context in which the specifications describe the “authorization transaction” does not limit logging-in “transactions” to emergency situations.

Instead of finding the embodiment in the specifications limiting, the Court reads the embodiment to illustrate that “transactions” include more than just financial interactions but also include non-financial interactions such as accessing a closed system. Indeed, the Court’s reading of the specifications is consistent with Federal Circuit authority which holds that generally embodiments are not intended to be limitations but are intended to illustrate ways in which aspects of the disclosed invention can be practiced. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1323 (Fed. Cir. 2005) (en banc) (“[W]e have expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment.”); *Thorner v. Sony Comput. Entm’t Am. LLC*, 669 F.3d 1362, 1366 (Fed. Cir. 2012) (“It is likewise not enough that the only embodiments, or all of the embodiments, contain a particular limitation. We do not read limitations from the specification into claims; we do not redefine words. Only the patentee can do that.”).

Furthermore, the Court is unpersuaded by Defendants’ argument that logging into the claimed system is specifically excluded from the scope of “transactions.” The patents teach that a “user may log into the inventive system . . . and edit his/her Profile . . . [and] may view and edit the accounts.” ’360 Patent col.31 ll.25–31. The patents also teach that “account . . . modification” is a type of transaction that benefits from enhanced authentication efforts. *Id.* at col.33 ll.34–41. Thus, the specifications clearly contemplate access to the inventive system as the type of transaction meant to benefit from the security provided by the invention. This is not a disavowal of “logging into the system.” *See GE Lighting Sols., LLC v. AgiLight, Inc.*, 750 F.3d 1304, 1309 (Fed. Cir. 2014) (“disavowal requires that the specification or prosecution history make clear that the invention does not include a particular feature” (quotation and modification marks omitted)). Finally, the Court notes that the “continues processing the transaction” after the verification

request limitation of claim 1 of the '360 Patent does not tend to show that logging in is excluded from the scope of “transaction.” The Court finds that if a log in constitutes the transaction it can “continue to be processed,” for example, if the log in is determined to be authentic and the transaction is subsequently processed to allow access.

Accordingly, the Court rejects Defendants’ proposed “distinct from logging into the system” limitation and determines that “transaction” has its plain and ordinary meaning without the need for further construction. *See Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1206–07 (Fed. Cir. 2010) (the district court adequately resolved the claim-construction dispute by rejecting a party’s proposed construction and preventing that party’s expert from repeating the rejected construction to the jury).

B. “recognizes an occurrence of an event” / “recognizing, by a computer, an occurrence of an event”

Disputed Term	Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
“recognizes an occurrence of an event” <ul style="list-style-type: none"> • ’360 Patent Claim 1 	No construction needed / plain and ordinary meaning.	“recognizes, via the second communication link(s), the result of the verification request”
“recognizing, by a computer, an occurrence of an event” <ul style="list-style-type: none"> • ’360 Patent Claims 32, 63 		

Because the parties’ arguments and proposed constructions with respect to these terms are related, the Court addresses the terms together.

The Parties’ Positions

Plaintiff submits these terms consist of common words used in their customary manner and do not need to be rewritten to be understood by a juror. Dkt. No. 148 at 15. Plaintiff argues Defendants’ proposal redefines the terms to limit them to an exemplary embodiment described in

the Asserted Patents. Plaintiff says that Defendants construction excludes other embodiments, such as an “occurrence” that is “an absence of a response,” communications that “occur over a plurality of communications media [] and/or links,” and an event that “is used . . . to identify which of a series of simultaneous communication link attempts to a party’s several devices has succeeded first.” *Id.* at 15–16 (quoting ’360 Patent col.8 ll.48–52, col.21 ll.54–62, Claims 11, 42) (modifications by Plaintiff). Plaintiff further submits Defendants’ proposed construction would improperly render Claim 1 coextensive with its dependent Claim 12 and Claim 32 with its dependent Claim 43. *Id.* at 16.

In addition to the claims, Plaintiff cites the following intrinsic and extrinsic evidence to support its position: **Intrinsic evidence:** ’360 Patent col.1 l.20, col.8 ll.12–13, col.8 ll.48–52, col.9 l.33, col.21 ll.54–62. **Extrinsic evidence:** Traynor Decl. ¶¶ 21–22 (Dkt. No. 148-1 at 7); Merriam-Webster Online Dictionary, “recognize,” (Plaintiff’s Ex. 5, Dkt. No. 148-7)⁹; Merriam-Webster Online Dictionary: “occurrence,” (Plaintiff’s Ex. 6, Dkt. No. 148-8)¹⁰, “occur,” (Plaintiff’s Ex. 7, Dkt. No. 148-9)¹¹, “event,” (Plaintiff’s Ex. 8, Dkt. No. 148-10)¹²; Oxforddictionaries.com: “recognizes,” (Plaintiff’s Ex. 9, Dkt. No. 148-11)¹³, “occurrence,” (Plaintiff’s Ex. 10, Dkt. No. 148-12)¹⁴, “event,” (Plaintiff’s Ex. 11, Dkt. No. 148-12)¹⁵.

Defendants respond their proposed construction “accurately reflects the *only* disclosed manner in which the claimed transaction processing module ‘recognizes the occurrence of an event.’” Dkt. No. 156 at 15 (emphasis in original). Defendants argue their construction does not

⁹ <http://www.merriam-webster.com/dictionary/recognize>

¹⁰ <http://www.merriam-webster.com/dictionary/occurrence>

¹¹ <http://www.merriam-webster.com/dictionary/occur>

¹² <http://www.merriam-webster.com/dictionary/event>

¹³ http://www.oxforddictionaries.com/us/definition/american_english/recognize?q=recognizes

¹⁴ http://www.oxforddictionaries.com/us/definition/american_english/occurrence

¹⁵ http://www.oxforddictionaries.com/us/definition/american_english/event

exclude any exemplary embodiment as each refers to use of a second communications link. *Id.* at 16–17. Defendants further respond that their construction does not violate the doctrine of claim differentiation as Claims 11, 12, 42, and 43 are differentiated from the claims from which they depend not because the response is via second communications link, but rather because of the timing of that response. *Id.* at 17–18.

In addition to the claims, Defendants cite the following **intrinsic evidence** to support their position: '360 Patent col.8 ll.48–52, col.11 ll.7–17, col.12 ll.41–46, col.21 ll.54–62, col.22 ll.7–22, col.26 ll.42–43, figs.3, 25.

Plaintiff replies that it would be improper to limit “recognizes an occurrence of an event” to “via the second communication link” as doing so would limit the invention to single embodiment. Dkt. No. 158 at 6. Plaintiff further replies that even the described embodiment relied upon by Defendants allows for recognition of a “confirmatory” event through an “appropriate” communication link, not only through the second communication link. *Id.* at 6–7 (citing '360 Patent col.12 ll.41–46).

Plaintiff cites further **intrinsic evidence** to support its position: '360 Patent col.12 ll.4–12, col.12 ll.41–46.

Analysis

The issue is whether the occurrence of an event is necessarily recognized “via the second communication link(s).” It is not.

As relevant to the claims, the Asserted Patents describe an “event” as information generated by the system to monitor the progress of a communication session. More particularly, the Asserted Patents state it is information generated to monitor the status of a request for confirmation for a particular transaction. '360 Patent col.20 l.33–col.21 l.11, col.26 l.38–col.27

1.2. The system sends this verification request on one or more communication links and, once connected on a link, the system either waits for a response on that link or looks for a response on a different link. *Id.* at col.26 ll.38–41 (“If an input is indeed required [FIG. 25, H], and the device supports it (per the Communication Sequence Pattern [FIG.8, 8b: ‘Interactivity Flag’]), the executing Script process will preferably prompt for and wait to receive input from the party.”), col.28 ll.18–33 (“It is further possible and desirable, under certain conditions, to establish an inbound Communication Sequence Pattern [FIG. 8, 8c], to be initiated by the party, as a follow-on Sequence to an outbound Sequence. For example, a wireless text message may be sent to the party’s cellular telephone, which text message includes a callback hyperlink to an embodiment of the inventive system’s Telephony Communications Subsystem Interface [FIG. 11, 211].”). The Asserted Patents say the requests for confirmation can result in: (1) connection and verification of the transaction, (2) connection and failure to verify the transaction, or (3) failure to connect. *Id.* at col.22 ll.7–22. That is, an “event” related to a verification request is a confirming response, a lack of response or a response that does not confirm the transaction, or a lack of response due to a failure to connect.

While the Court agrees with Defendants that the doctrine of claim differentiation is not violated by reading in the limitation “via the second communication link(s), the result of the verification request,” the Court declines to read in the limitation. First, Claims 11 and 12 state that an “event” comprises a lack of response or a response “via the one or more second communications links.” The specific mention of “one or more second communications links” implies that an “event” does not inherently occur “via the one or more second communications links.” *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005) (en banc) (noting that the use of the term “steel baffles” “strongly implies that the term ‘baffles’ does not inherently

mean objects made of steel”). Second, the patents teach that the response to a verification request may come on any communications link, including one that is neither the “first communications link” nor the “second communications link.” ’360 Patent col.28 ll.18–33 (describing a text-message verification request and a telephony response). Defendants’ proposed construction excludes these embodiments because it requires all “results” of “verification requests” to be via the “second communications link.” The Court declines to adopt a construction that excludes a preferred embodiment. *See C.R. Bard, Inc. v. United States Surgical Corp.*, 388 F.3d 858, 865 (Fed. Cir. 2004) (“[a] construction that excludes a preferred embodiment is rarely, if ever, correct”).

Accordingly, the Court construes these terms as follows:

- “recognizes an occurrence of an event” means “recognizes a result of the verification request”;
- “recognizing, by a computer, an occurrence of an event” means “recognizing, by a computer, a result of the verification request.”

C. “transaction processing module” / “a processor configured to verify the authenticity of the account access request based on the response” / “a processor configured to identify a second device associated with the account”

Disputed Term	Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
“transaction processing module” <ul style="list-style-type: none"> ’360 Patent Claims 1, 44, 45, 48, 60 	<p>No construction needed / plain and ordinary meaning.</p> <p>Alternatively:</p> <ul style="list-style-type: none"> hardware and/or software component that processes a transaction, such as a web e commerce server, banking transaction system, or credit card authorization or risk assessment system or device <p>Alternatively (if 35 U.S.C. § 112, ¶ 6):</p> <ul style="list-style-type: none"> Function: Processes a transaction and communicates via a first communications link and one or more second communications links Corresponding structure: Hardware and/or software component that includes a remote transaction engine, such as a web e-commerce server, banking transaction system, or credit card authorization or risk assessment system or device. 	<p>35 U.S.C. § 112, ¶ 6</p> <ul style="list-style-type: none"> Function: receives, via the first communications link, incoming information associated with a transaction; identifies at least one party associated with the transaction, wherein the at least one party is authorized to verify the transaction and is a non-merchant with respect to the transaction; transmits, via the one or more second communications links, a verification request to the at least one party to verify the transaction, wherein the one or more second communications links are different from the first communications link; recognizes an occurrence of an event; determines authenticity of the transaction based on the recognition of the occurrence of the event; and continues processing the transaction initiated over the first communications link Structure: The “determines authenticity of the transaction based on the recognition of the occurrence of the event” function is indefinite under 35 U.S.C. § 112(b)

Disputed Term	Plaintiff's Proposed Construction	Defendants' Proposed Construction
“a processor configured to verify the authenticity of the account access request based on the response” • '271 Patent Claim 19	No construction needed / plain and ordinary meaning.	35 U.S.C. § 112, ¶ 6 • Function: verify the authenticity of the account access request based on the response • Structure: Indefinite under 35 U.S.C. § 112(b)
“a processor configured to identify a second device associated with the account” • '271 Patent Claim 19	No construction needed / plain and ordinary meaning.	35 U.S.C. § 112, ¶ 6 • Function: identify a second device associated with the account • Structure: Indefinite under 35 U.S.C. § 112(b)

Because the parties’ arguments and proposed constructions with respect to these terms are related, the Court addresses the terms together.

The Parties’ Positions

Plaintiff submits that the meaning of each of these terms is clear from the plain meaning of the claim language and therefore the terms do not need to be construed. Dkt. No. 148 at 17, 29–31. Plaintiff further submits that none of the terms is governed by 35 U.S.C. § 112, ¶ 6. *Id.* at 18–20, 29–31.

Transaction processing module. Plaintiff submits the transaction processing module is defined in the limitations of Claim 1 of the ’360 Patent and is further defined in claims depending from Claim 1. *Id.* at 18. Plaintiff further submits that Defendants cannot overcome the presumption against application of § 112, ¶ 6 that arises from the lack of the word “means” in the term. *Id.* 18–20. Finally, Plaintiff submits that even if governed by § 112, ¶ 6, the term does not render any claim indefinite given that: (1) the claim’s recited function is “processes a transaction

and communicate via a first communications link and one or more second communications links”—and not the entirety of Claim 1, as Defendants propose and (2) the ’360 Patent teaches the structure for performing this function is a “hardware and/or software component that includes a remote transaction engine, such as a web e-commerce server, banking transaction system, or credit card authorization or risk assessment system of device.” *Id.* at 20–21. (citing ’360 Patent col.8 ll.31–38, col.14 ll.56–59, fig.1).

Processor configured to verify the authenticity of the account access request based on the response. Plaintiff submits Defendants cannot overcome the presumption against application of § 112, ¶ 6 that arises from the lack of the word “means” in the term. *Id.* at 31. Plaintiff argues, at a minimum, the term “processor” discloses a class of structure and therefore § 112, ¶ 6 does not apply. *Id.* at 31.

Processor configured to identify a second device associated with the account. Plaintiff submits Defendants cannot overcome the presumption against application of § 112, ¶ 6 that arises from the lack of the word “means” in the term. *Id.* at 29. Plaintiff argues, at a minimum, the term “processor” discloses a class of structure discloses a class of structure and therefore § 112, ¶ 6 does not apply. *Id.* at 29–30.

In addition to the claims, Plaintiff cites the following intrinsic and extrinsic evidence to support its position: **Intrinsic evidence:** ’360 Patent col.8 ll.31–38, col.14 ll.56–59, fig.1. **Extrinsic evidence:** Traynor Decl. ¶¶ 23–27, 38–43 (Dkt. No. 148-1 at 8–9, 13–14); Merriam-Webster Online Dictionary: “transaction,” (Plaintiff’s Ex. 3, Dkt. No. 148-5)¹⁶, “processing,” (Plaintiff’s Ex. 12, Dkt. No. 148-14)¹⁷, “module,” (Plaintiff’s Ex. 13, Dkt. No. 148-15)¹⁸,

¹⁶ <http://www.merriam-webster.com/dictionary/transaction>

¹⁷ <http://www.merriam-webster.com/dictionary/processing>

¹⁸ <http://www.merriam-webster.com/dictionary/module>

“processor,” Ex. 30, (Plaintiff’s Ex. 30, Dkt. No. 148-32)¹⁹, “configured,” (Plaintiff’s Ex. 31, Dkt. No. 148-33)²⁰, “account,” (Plaintiff’s Ex. 26, Dkt. No. 148-28)²¹, “verify,” (Plaintiff’s Ex. 34, Dkt. No. 148-36)²², “authenticity,” (Plaintiff’s Ex. 35, Dkt. No. 148-37)²³, “access,” (Plaintiff’s Ex. 36, Dkt. No. 148-38)²⁴, “request,” (Plaintiff’s Ex. 37, Dkt. No. 148-39)²⁵, “response,” (Plaintiff’s Ex. 38, Dkt. No. 148-40)²⁶, “identify,” (Plaintiff’s Ex. 24, Dkt. No. 148-26)²⁷, “device,” (Plaintiff’s Ex. 25, Dkt. No. 148-27)²⁸, “associated,” (Plaintiff’s Ex. 19, Dkt. No. 148-21)²⁹, “account,” (Plaintiff’s Ex. 26, Dkt. No. 148-28)³⁰; Oxforddictionaries.com: “transaction,” (Plaintiff’s Ex. 4, Dkt. No. 148-6)³¹, “processing,” (Plaintiff’s Ex. 14, Dkt. No. 148-16)³², “module,” (Plaintiff’s Ex. 15, Dkt. No. 148-17)³³, “processor,” (Plaintiff’s Ex. 32, Dkt. No. 148-34)³⁴, “configured,” (Plaintiff’s Ex. 33, Dkt. No. 148-35)³⁵, “account,” (Plaintiff’s Ex. 29, Dkt. No. 148-31)³⁶, “verify,” (Plaintiff’s Ex. 39, Dkt. No. 148-41)³⁷, “authenticity,” (Plaintiff’s Ex. 40, Dkt. No. 148-42)³⁸, “authentic,” (Plaintiff’s Ex. 41, Dkt. No. 148-43)³⁹,

¹⁹ <http://www.merriam-webster.com/dictionary/processor>

²⁰ <http://www.merriam-webster.com/dictionary/configured>

²¹ <http://www.merriam-webster.com/dictionary/account>

²² <http://www.merriam-webster.com/dictionary/verify>

²³ <http://www.merriam-webster.com/dictionary/authenticity>

²⁴ <http://www.merriam-webster.com/dictionary/access>

²⁵ <http://www.merriam-webster.com/dictionary/request>

²⁶ <http://www.merriam-webster.com/dictionary/response>

²⁷ <http://www.merriam-webster.com/dictionary/identify>

²⁸ <http://www.merriam-webster.com/dictionary/device>

²⁹ <http://www.merriam-webster.com/dictionary/associated>

³⁰ <http://www.merriam-webster.com/dictionary/account>

³¹ http://www.oxforddictionaries.com/us/definition/american_english/transaction

³² http://www.oxforddictionaries.com/us/definition/american_english/process?q=processing#process_13

³³ http://www.oxforddictionaries.com/us/definition/american_english/module

³⁴ http://www.oxforddictionaries.com/us/definition/american_english/processor

³⁵ http://www.oxforddictionaries.com/us/definition/american_english/configure?q=configured

³⁶ http://www.oxforddictionaries.com/us/definition/american_english/account

³⁷ http://www.oxforddictionaries.com/us/definition/american_english/verify

³⁸ http://www.oxforddictionaries.com/us/definition/american_english/authenticity

“access,” (Plaintiff’s Ex. 42, Dkt. No. 148-44)⁴⁰, “request,” (Plaintiff’s Ex. 43, Dkt. No. 148-45)⁴¹, “response,” (Plaintiff’s Ex. 44, Dkt. No. 148-46)⁴², “identify,” (Plaintiff’s Ex. 27, Dkt. No. 148-29)⁴³, “device,” (Plaintiff’s Ex. 28, Dkt. No. 148-30)⁴⁴, “associated,” (Plaintiff’s Ex. 22, Dkt. No. 148-24)⁴⁵, “account,” (Plaintiff’s Ex. 29, Dkt. No. 148-31)⁴⁶.

Defendants respond that each of these terms is a means-plus-function limitation governed by 35 U.S.C. § 112, ¶ 6 and that each fails to comply with the statute’s requirement that the patent disclose the structure for performing the function. Dkt. No. 156 at 19–24, 29–30. Thus, Defendants conclude, these terms render claims indefinite. *Id.*

Transaction processing module. Defendants respond the “transaction processing module” is not defined in Claim 1 of the ’360 Patent other than by the functions that it performs. Defendants specifically note that “module” is a nonce word that does not connote structure, therefore the term is subject to § 112, ¶ 6. *Id.* at 19–20. Defendants further respond that what Plaintiff purports is the described structure of the “transaction processing module” is rather a description of the remote transaction engine (RTE) that does not perform any of the functions recited in Claim 1. *Id.* at 20–21. According to Defendants, the ’360 Patent does not provide an adequate algorithm for the module’s claimed function which is that it “determines authenticity of the transaction based on the recognition of the occurrence of the event.” Therefore, Defendants assert, the term renders the claims indefinite. *Id.* at 24.

³⁹ http://www.oxforddictionaries.com/us/definition/american_english/authentic
⁴⁰ http://www.oxforddictionaries.com/us/definition/american_english/access
⁴¹ http://www.oxforddictionaries.com/us/definition/american_english/request
⁴² http://www.oxforddictionaries.com/us/definition/american_english/response
⁴³ http://www.oxforddictionaries.com/us/definition/american_english/identify
⁴⁴ http://www.oxforddictionaries.com/us/definition/american_english/device
⁴⁵ http://www.oxforddictionaries.com/us/definition/american_english/associated
⁴⁶ http://www.oxforddictionaries.com/us/definition/american_english/account

Processor configured to verify the authenticity of the account access request based on the response. Defendants respond the recitation of a “generic computer processor” does not alone connote sufficient structure to avoid § 112, ¶ 6. *Id.* at 21–22 (citing *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1366 (Fed. Cir. 2008)). Thus, Defendants argue, the term “processor configured to verify . . .” is purely functional and the ’271 Patent does not describe how the processor “relates structurally to, or communicates with, the other components” in the described invention such as to otherwise provide any structural connotation for the processor. *Id.* at 22–23. Defendants equate the processor’s function, “verify the authenticity of the account access request based on the response,” with the transaction-processing-module’s function of “determines authenticity of the transaction based on the recognition of the occurrence of the event.” Defendants similarly conclude the ’271 Patent does not provide an algorithm sufficient to perform the function. *Id.* at 23–24.

Processor configured to identify a second device associated with the account. Defendants respond that the “processor configured to identify . . .” is subject to § 112, ¶ 6 for the same reasons that the “processor configured to verify . . .” is subject to the statute. *Id.* at 34. Defendants contend that the ’271 Patent fails to disclose an algorithm to “identify a second device associated with the account.” *Id.* at 35.

In addition to the claims, Defendants cite the following **intrinsic evidence** to support their position: ’360 Patent col.11 l.59 – col.13 l.13, col.15 ll.4–10, col.15 ll.40–60, col.22 ll.7–22, col.26 l.38 – col.27 l.8, fig.25; ’271 Patent col.10 l.42 – col.11 l.10, col.16 ll.1–21, col.26 l.28 – col.27 l.16.

Plaintiff replies that none of these terms use the word “means” and therefore are presumed not to be governed by § 112, ¶ 6. Dkt. No. 158 at 9–10, 13–14. Plaintiff argues

Defendants have not overcome this presumption because the claims include a description of the operation of the “processors” and “module.” *Id.* at 11. Plaintiff further submits that even if §112, ¶ 6 applies, the patents disclose structure for the module, ’360 Patent col.8 ll.31–38, col.14 ll.56–59, fig.1, and the “processor configured to verify” ’271 Patent col.8 ll.35–42, col.14 l.51 – col.15 l.7, fig.1. At the hearing, Plaintiff further argued the antecedent basis of “the transaction processing module” in Claims 44, 45, 48, and 60 of the ’360 Patent is implicit in the computer of independent Claim 32’s “computer-implemented method.”

Plaintiff cites further **intrinsic evidence** to support its position: ’271 Patent col.8 ll.35–42, col.14 l.51–col.15 l.7, fig.1.

Analysis

The dispute raises two issues: (1) whether the terms above are governed by § 112, ¶ 6; and (2) if the terms above are governed by § 112, ¶ 6, whether the patents disclose sufficient structure so that they are not indefinite. With respect to the first issue, the Court finds that the “transaction processing module” term of Claim 1 of the ’360 patent is not governed by § 112, ¶ 6 but the “processor configured to” terms of Claim 19 of the ’271 Patent are governed by § 112, ¶ 6. With respect to the second issue, the patents recite sufficient structure linked to the “processor configured to” terms of Claim 19 of the ’271 Patent. The terms in Claim 19 do not render it indefinite. While the Court holds that “transaction processing module” of Claim 1 of the ’360 Patent does not render the claim indefinite, the Court also holds that “the transaction processing module” term appears in Claims 44, 45, 48, and 60 without any antecedent basis. Those claims are indefinite.

The Court starts from the presumption that § 112, ¶ 6 does not apply because none of the terms above start with the word “means.” *Williamson v. Citrix Online, LLC*, 792 F.3d 1339,

1347–49 & n.3 (Fed. Cir. 2015) (en banc in relevant portion). However, “the presumption can be overcome and § 112, para. 6 will apply if the challenger demonstrates that the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function.” *Id.* at 1349 (quotation marks omitted). Whether a particular computer-implemented limitation is sufficiently structural to avoid § 112, ¶ 6 is not governed by the algorithm requirements of *Aristocrat Techs. Australia Pty Ltd. v. International Game Tech.*, 521 F.3d 1328 (Fed. Cir. 2008). *See Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1298 (Fed. Cir. 2014).

Transaction processing module. Defendants have not overcome the presumption that § 112, ¶ 6 does not apply to the term “transaction processing module” as it appears in Claim 1 of the ’360 Patent. Claim 1, reproduced here and annotated by the Court, describes in detail the operation of the “transaction processing module.” The claim as a whole discloses a series of steps the module performs when it is in operation. That is, Claim 1 discloses an algorithm. The claim explains that the

’360 Patent

1. A computer-implemented system for providing a transaction, the system comprising:
a transaction processing module configured to process a transaction and to communicate via a first communications link and one or more second communications links, wherein the transaction processing module:
receives, via the first communications link, incoming information associated with a transaction;
identifies at least one party associated with the transaction, wherein the at least one party is authorized to verify the transaction and is a non-merchant with regards to the transaction;
transmits, via the one or more second communications links, a verification request to the at least one party to verify the transaction, wherein the one or more second communications links are different from the first communications link;
recognizes an occurrence of an event;
determines authenticity of the transaction based on the recognition of the occurrence of the event; and
continues processing the transaction initiated over the first communications link.

“transaction processing module” performs the “transaction processing” function in the following manner. The “module” (1) communicates by receiving transaction information, (2) identifies a specific party to the transaction, (3) transmits a request for verification to that party, (3) recognizes the result of that request, (4) determines the authenticity of the request using that

result, and (5) appropriately continues with the transaction. This step-wise description of the operation of the “module” forms an algorithm. The algorithm connotes structure. *See, e.g., Linear Tech. Corp. v. Impala Linear Corp.*, 379 F.3d 1311, 1319–21 (Fed. Cir. 2004) (“circuit [for performing a function]” found to be sufficiently definite structure because the claim recited the “objectives and operations” of the circuit); *Apple*, 757 F.3d at 1295, 1298–99, 1301 (Fed. Cir. 2014) (noting that structure for software “is understood through, for example, an outline of an algorithm, a flowchart, or a specific set of instructions or rules” and finding “heuristic [for performing a function]” to be sufficiently definite structure because the patent described the operation and objectives of the heuristic); *Collaborative Agreements, LLC v. Adobe Sys.*, No. 15-cv-03853-EMC, 2015 U.S. Dist. LEXIS 161809, at *11–*24 (N.D. Cal. Dec. 2, 2015) (“code segment [for performing a function]” found to be sufficiently definite structure because the claim described the operation of the code segment); *Finjan, Inc. v. Proofpoint, Inc.*, No. 13-cv-05808-HSG, 2015 U.S. Dist. LEXIS 162504, at *31–*32 (N.D. Cal. Dec. 3, 2015) (“processor [for performing a function]” found to be sufficiently definite structure because the claim described how the processor functions with the other claim components); *SuperSpeed, LLC v. Google, Inc.*, No. H-12-1688, 2014 U.S. Dist. LEXIS 4479, at *78–*79 (S.D. Tex. Jan. 14, 2014) (“code [for performing a function]” found to be sufficiently definite structure because the claim described the operation of the code within the invention).

“Transaction processing module” is used in Claims 44, 45, 48, and 60 of the ’360 Patent, which depend from independent Claim 32, in different ways than it is used in Claim 1. First, the recitation of the role of the “transaction processing module” in Claims 44, 45, 48, and 60 is abbreviated. Second, and importantly, each of these claims state that there is “the transaction processing module.” But the word “the” in the term “the transaction processing module” does

not refer back to any “transaction processing module” that is described earlier in the claim, or in any claim in the dependency chain. Thus, there is no express antecedent basis for the term. The Court rejects Plaintiff’s argument that the antecedent basis is implicit in the computer of Claim 32’s “computer-implemented method.” The Court finds there is no implicit antecedent basis. In sum, Claims 44, 45, 48, and 60 of the ’360 Patent are indefinite because the term “the transaction processing module” is not tied to a function or structure that can be ascertained by a person of ordinary skill in the art reading the Asserted Patents. *See Halliburton Energy Servs. v. M-I LLC*, 514 F.3d 1244, 1249 (Fed. Cir. 2008) (“a claim could be indefinite if a term does not have proper antecedent basis where such basis is not otherwise present by implication or the meaning is not reasonably ascertainable”); *Nautilus Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2129 (2014) (“a patent’s claims, viewed in light of the specification and prosecution history, [are required to] inform those skilled in the art about the scope of the invention with reasonable certainty”).

Processor configured to verify the authenticity of the account access request based on the response and processor configured to identify a second device associated with the account. The term “processor configured to . . .” appears in Claim 19 of the ’271 Patent, reproduced here and annotated by the Court. The Court notes that in many instances, the term “processor” itself connotes sufficient structure and is not a “nonce” or “functional” word that is subject to the limitations of § 112, ¶ 6. In the

’271 Patent

19. A system for authenticating a device to be associated with an account, the system comprising:
a server configured to receive, over a network, an account access request from a first device;
a processor configured to identify a second device associated with the account;
a module configured to transmit to the second device, over a network, a verification message associated with the account access request;
a server configured to receive, over a network, a response related to the verification message;
a processor configured to verify the authenticity of the account access request based on the response; and
a database configured to store authentication information for the first device, such that one or more subsequent requests to access the account from the first device are granted without communicating with the second device.

context of the “processor configured to . . .” terms, however, each processor is defined only by the function that it performs. As such, the Defendants have rebutted the presumption that § 112, ¶ 6 does not apply to the term “processor” in these claims. *See Apple*, 757 F.3d at 1298 (“Indeed, the typical physical structure that implements software, a computer, cannot be relied upon to provide sufficiently definite structure for a software claim lacking ‘means.’”)⁴⁷; *Linear Tech. Corp.*, 379 F.3d at 1319–21 (Fed. Cir. 2004) (looking to the description of “objectives and operations” of the claimed “circuit” to determine if § 112, ¶ 6 applied).

Specifically, both Claim 19 and the description of the exemplary embodiments in the specifications do not detail the objectives and operations of the “processor configured to . . .” terms in a way that connotes structure sufficient to avoid the application of § 112, ¶ 6. Unlike Claim 1 of the ’360 Patent which describes each step performed by the “transaction processing module,” Claim 19 of the ’271 Patent provides a limited description of the “processor configured for . . .” terms. Claim 19 does not describe how the processors interact with each other or with other limitations in the claim to achieve their objectives. Furthermore, while the patent describes an aspect of an exemplary embodiment of the invention (the Central System) as “comprised of one or more processors,” it does not describe or depict those processors connecting to and interacting with the other components in the embodiment. *See, e.g.*, ’271 Patent col.16 ll.1–21.

⁴⁷ The Court notes that *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359 (Fed. Cir. 2008), cited by Defendants in support of their argument that the “processor configured to . . .” terms are governed by § 112, ¶ 6, is inapposite. The term at issue in *Net MoneyIN* was “bank computer including ***means for generating an authorization indicia***.” 545 F.3d at 1365 (emphasis in original). Thus, the presumption in favor of § 112, ¶ 6 applied. *Id.* at 1366. The Federal Circuit held that because “bank computer” included the “means for” limitation rather than being the means, the claim required further structure that was a component of the bank computer and that was sufficient to perform the function. That structure was entirely missing from the claims. *Id.* Here, in contrast, there is a presumption against application of § 112, ¶ 6 because the “processor configured for . . .” terms do not include “means” and the processor is clearly recited as the structure for the function.

Rather, the processors of the embodiment are generically defined as the things within the Central System “for handling and manipulating” the transaction message. *See, e.g., id.* Thus, the “processor configured to . . .” terms are different from processor-for-performing-a-function terms previously considered by the Court and found not to be governed by § 112, ¶ 6.

The Court has typically found “processor” to connote sufficient structure to avoid the application of § 112, ¶ 6 in different circumstances. For example, in *Smartflash LLC v. Apple Inc.*, 77 F. Supp. 3d 535, 545 (E.D. Tex. 2014) the Court noted that the claims recited how the processor terms were connected with other claim limitations and those connections were described in the patents. Likewise, in *Advanced Mktg. Sys., LLC v. CVS Pharm., Inc.*, Case No. 6:15-cv-134-JRG-KNM, 2016 U.S. Dist. LEXIS 58472, at **67–68 (E.D. Tex. May 3, 2016), the Court noted that the “claims at issue provide further evidence of structure by describing physical connections between the data processor and other claimed elements.” The Court also noted that “the claims and specification describe how the data processor accomplishes the claimed functions.” *Id.* Here how the “processor configured to . . .” terms operate with the other claimed components is not sufficiently recited or described. As such, the “processor configured to . . .” terms are governed by § 112, ¶ 6. The Court thus looks to the specifications to determine if the specifications disclose sufficient structure to satisfy the functional claiming requirements under § 112, ¶ 6.

The '271 Patent provides sufficient structure for performing the functions. With respect to the “verify the authenticity of the account access request based on the response,” the patent describes a “Variant Input” software object method wherein the response to the verification request is checked for “acceptable values.” '271 Patent col.20 ll.45–62; *see also, id.* at col.28 l.65–col.29 l.6 (noting the response may be “the required input . . . such as a PIN, password, or

CVV2/CVC2,CID value” or may be other than the “required input”). The patent also describes that these confirmation values may be stored in an environmental variable (“PartyCV[n]”) or in the party Profiles Database (“Confirming Value (CV)”) and that the type of confirmation value is also stored (“PartyCVType[n] . . . such as PIN, CVC2, CVV2, CID, password, ZIP code, final 4 digits of Social Security Number, etc.”). *Id.* at col.17 l.33 – col.20 l.12 (Table 3), col.22 ll.27–37; *see also, id.* at col.25 ll.17–22 (“Confirming Value Type . . . required as input from the party to successfully authenticate and verify the transaction and party’s identity.”), col.26 l.64 – col.27 l.13 (identify the “expected Confirmation Value” based on the party’s identity).

The patent further describes that the confirmation values may be stored in the system or received as input. *Id.* at col.22 ll.27–33. The patent describes a “Status” property of the communication software object, that describes “the most recent event during the session . . . [including] the result (e.g., reached and confirmed, reached without confirmation, did not reach with error code describing why)”). And the patent provides a list of methods for looking up data and conditionally executing functions based on the truth of an expression, such as the “Variant DLookup” method and the “if . . . Then . . . Else,” “Select|Case . . . Else,” and “While” statements. *Id.* at col.19 l.55 – col.21 l.44. Thus, the patent describes that the authenticity of a transaction is verified by comparing the response to the verification request to the acceptable responses: if the response is the same as an acceptable response, the transaction is verified, otherwise it is not.

With respect to “identify a second device associated with the account,” the patent describes that in the preferred embodiment, the Central System processor will “[c]onsult the party’s Communication Profile record . . . using an SQL query or stored (database) procedure, and then: a. Group all the corresponding communication devices . . . for the party.” *See id.* at

col.26 l.28 – col.27 l.13. The patent further describes that the system may access the account-associated date in an external database. *Id.* at col.25 ll.23–31. Thus, the patent describes that one or more devices are identified by searching the account data “using an SQL query or stored (database) procedure.” These descriptions satisfy the structural-disclosure requirements of § 112, ¶ 6. *See Typhoon Touch Techs., Inc. v. Dell, Inc.*, 659 F.3d 1376, 1385 (Fed. Cir. 2011) (the patentee may disclose a software-implemented structure “in any understandable terms including as a mathematical formula, in prose, or as a flow chart, or in any other manner that provides sufficient structure”).

Accordingly, the Court determines that “transaction processing module” as it appears in Claim 1 of the ’360 Patent is not governed by § 112, ¶ 6 and needs no further construction given the definition of the module in Claim 1. The Court further determines that Claims 44, 45, 48, and 60 of the ’360 Patent are indefinite due to their recitation of “the transaction processing module” without any explicit or implicit antecedent basis. Finally, the Court determines that the “processor configured to . . .” limitations of the ’271 Patent are governed by § 112, ¶ 6 and construes them as follows:

- “a processor configured to verify the authenticity of the account access request based on the response” means “construction” is governed by 35 U.S.C. § 112, ¶ 6 as follows:
 - **function:** verify the authenticity of the account access request based on the response,
 - **structure:** processor programmed to compare the response with accepted responses, and equivalents;

- “a processor configured to identify a second device associated with the account”

is governed by 35 U.S.C. § 112, ¶ 6 as follows:

- **function:** identify a second device associated with the account,
- **structure:** processor programmed to consult internal or external data associated with an account using a SQL query or stored (database) procedure, and equivalents.

D. “continues processing the transaction” / “processing the transaction”

Disputed Term	Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
“continues processing the transaction” • ’360 Patent Claim 1	No construction needed / plain and ordinary meaning.	Indefinite under 35 U.S.C. § 112(b)
“processing the transaction” • ’360 Patent Claims 1, 32, 63		

Because the parties’ arguments and proposed constructions with respect to these terms are related, the Court addresses the terms together.

The Parties’ Positions

Plaintiff submits the meanings of these terms are clear without construction. Dkt. No. 148 at 22–23. Plaintiff argues Defendants’ own proposed construction of “transaction” shows that “processing the transaction” does not render any claim indefinite. *Id.* Plaintiff further argues Defendants cannot prove that these terms render any claim indefinite as Defendants have not presented any evidence of indefiniteness. *Id.* at 23.

In addition to the claims, Plaintiff cites the following intrinsic and extrinsic evidence to support its position: **Intrinsic evidence:** ’360 Patent col.8 ll.31–38, col.14 ll.56–59, fig.1. **Extrinsic evidence:** Traynor Decl. ¶¶ 28–29 (Dkt. No. 148-1 at 10); Merriam-Webster Online

Dictionary: “transaction,” (Plaintiff’s Ex. 3, Dkt. No. 148-5)⁴⁸, “processing,” (Plaintiff’s Ex. 12, Dkt. No. 148-14)⁴⁹; Oxforddictionaries.com: “processing,” (Plaintiff’s Ex. 14, Dkt. No. 148-16)⁵⁰, “transaction,” (Plaintiff’s Ex. 16, Dkt. No. 148-18)⁵¹.

Defendants respond that these terms are generic and the ’360 Patent does not provide any guidance regarding what “processing” is involved in “processing the transaction.” Dkt. No. 156 at 25. That is, according to Defendants, the ’360 Patent provides no description as to what entails “processing the transaction.” *Id.* at 25–26. Defendants contend that the uncertainty from this lack of description is exacerbated by independent claims reciting that the event used to determine the authenticity is a lack of response, and it is unclear how a transaction is processed after it was not authenticated. *Id.* at 26. Ultimately, Defendants argue that the “processing the transaction” is unbounded and therefore renders claims indefinite. *Id.* at 27.

In addition to the claims, Defendants cite the following **intrinsic evidence** to support their position: ’360 Patent col.8 ll.31–38, col.10 l.5 – col.11 l.6, col.11 l.59 – col.12 l.59, col.14 l.56 – col.15 l.12, col.17 ll.24–32, col.22 ll.7–22.

Plaintiff replies that the ’360 Patent provides examples of how the transaction is processed in the event of a transaction that is not authenticated. For example, the system can notify the owner/user of the fraudulent transaction. Dkt. No. 158 at 12–13 (citing ’360 Patent col.11 ll.12–13).

Plaintiff cites further **intrinsic evidence** to support its position: **Intrinsic evidence:** ’360 Patent col.8 ll.25–30, col.11 ll.12–13, col.18 l.23 – col.19 l.41, fig.5.

⁴⁸ <http://www.merriam-webster.com/dictionary/transaction>

⁴⁹ <http://www.merriam-webster.com/dictionary/processing>

⁵⁰ http://www.oxforddictionaries.com/us/definition/american_english/process?q=processing#process__13

⁵¹ http://www.Oxforddictionaries.com/us/definition/american_english/transaction

Analysis

The issue is whether the scope of these terms is reasonably certain. The Court determines that it is and holds that Defendants have failed to show that these terms render any claim indefinite.

The Asserted Patents use “processing the transaction” according to its plain and ordinary meaning. The term generally refers to performing actions to complete or reject a transaction. The Asserted Patents describe an invention that improves security in processing remote and electronic transactions. *See, e.g.*, ’360 Patent col.1 ll.14–20, col.8 ll.5–21. The patents describe a system and method for verifying and reporting transactions of various types, such as transfers, purchases, payments, account openings, account closings, account modifications, entries into a restricted area, and entries into a restricted system. *See, e.g., id.* at col.1 ll.14–20, col.2 ll.13–17, col.3 ll.34–37, col.28 ll.10–17. The patents describe various prior-art systems that process these transactions to complete or reject them. *See, e.g., id.* at col.14 l.56 – col.15 l.4. Thus, a fund-transfer transaction is processed by transferring funds or rejecting the transaction if it is not authentic. Similarly, an account modification transaction is processed by modifying the account, or by rejecting the transaction if it is not authentic. In the same vein, a system-access transaction is processed by providing access to the system, or rejecting access if the request for access is not authentic. The Court does not find that patents directed to authentication technology need to disclose the details of how funds are transferred, how accounts are modified, or how access is granted for one of ordinary skill in the art to know that such processes can either happen, or not happen if the transactions are not verified. Defendants have not met their burden of proving that these terms render any claim indefinite.

Accordingly, these terms have their plain and ordinary meaning and do not need further construction.

E. “incoming information associated with a transaction”

Disputed Term	Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
“incoming information associated with a transaction” <ul style="list-style-type: none"> • ’360 Patent Claims 1, 32, 63 	No construction needed / plain and ordinary meaning.	“a message including at least data fields to: 1) identify one or more parties 2) identify the type of transaction, and 3) identify the price or amount of the transaction”

The Parties’ Positions

Plaintiff submits the meaning of this term is clear as written and it should therefore not be rewritten. Dkt. No. 148 at 24. Plaintiff further submits Defendants’ proposed construction improperly imports limitations from exemplary embodiments described in the Asserted Patents. *Id.* at 24–25. Plaintiff contends the patents describe the contents of a particular set of information associated with a transaction but explicitly state in the context of that description “[t]he choice of minimum necessary contents may vary from embodiment to embodiment of the inventive system.” *Id.* at 24 (quoting ’360 Patent col.15 ll.62–64) (modification by Plaintiff).

In addition to the claims, Plaintiff cites the following intrinsic and extrinsic evidence to support its position: **Intrinsic evidence:** ’360 Patent col.15 ll.62–64. **Extrinsic evidence:** Traynor Decl. ¶ 30 (Dkt. No. 148-1 at 10–11); Merriam-Webster Online Dictionary: “transaction,” (Plaintiff’s Ex. 3, Dkt. No. 148-5)⁵², “incoming,” (Plaintiff’s Ex. 17, Dkt. No. 148-19)⁵³, “information,” (Plaintiff’s Ex. 18, Dkt. No. 148-20)⁵⁴, “associated,” (Plaintiff’s Ex. 19,

⁵² <http://www.merriam-webster.com/dictionary/transaction>

⁵³ <http://www.merriam-webster.com/dictionary/incoming>

⁵⁴ <http://www.merriam-webster.com/dictionary/information>

Dkt. No. 148-21)⁵⁵; Oxforddictionaries.com: “transaction,” (Plaintiff’s Ex. 16, Dkt. No. 148-18)⁵⁶, “incoming,” (Plaintiff’s Ex. 20, Dkt. No. 148-22)⁵⁷, “information,” (Plaintiff’s Ex. 21, Dkt. No. 148-23)⁵⁸, “associated,” (Plaintiff’s Ex. 22, Dkt. No. 148-24)⁵⁹.

Defendants respond this term is defined in the ’360 Patent and should be accordingly construed. Dkt. No. 156 at 27–29 (citing ’360 Patent col.15 l.61 –col.16 l.4, fig.2).

In addition to the claims, Defendants cite the following **intrinsic evidence** to support their position: ’360 Patent col.14 ll.59–60, col.15 l.61 – col.16 l.4, col.16 ll.8–9, col.16 ll.37–44, fig.2.

Plaintiff replies the term is not specially defined as Defendants suggest, but rather that Defendants’ proposed limitations are found in a description of a particular embodiment and are not described as essential to the invention. Dkt. No. 158 at 7–8.

Plaintiff cites further **intrinsic evidence** to support its position: ’360 Patent col.15 ll.61–63.

Analysis

The issue is whether the “incoming information associated with a transaction” necessarily includes “data fields to: 1) identify one or more parties 2) identify the type of transaction, and 3) identify the price or amount of the transaction.” The term does not necessarily include these limitations.

The ordinary meaning of the phrase “incoming information associated with a transaction” adequately captures the meaning of the term. The “information” possesses two characteristics: it

⁵⁵ <http://www.merriam-webster.com/dictionary/associated>

⁵⁶ http://www.Oxforddictionaries.com/us/definition/american_english/transaction

⁵⁷ http://www.Oxforddictionaries.com/us/definition/american_english/incoming

⁵⁸ http://www.Oxforddictionaries.com/us/definition/american_english/information

⁵⁹ http://www.Oxforddictionaries.com/us/definition/american_english/associated

is incoming and it is associated with a transaction. The specifications do not redefine this ordinary meaning by attaching additional limitations as Defendants’ suggest for two reasons. First, Defendants incorrectly assert that a portion of the specification describes an essential feature of the invention. That portion of the specification does not describe an essential feature of the invention—it describes a “potential embodiment.” ’360 Patent col.14 l.51–col.6 l.7. Even if the particular information was described as essential to that embodiment, that alone is not enough to read the limitation into the claims. As the Court stated earlier, embodiments tend to illustrate some of the concepts the inventor intends to disclose in the specification. Embodiments are typically not limitations on how the claims should be read. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1323 (Fed. Cir. 2005) (en banc) (“we have expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment”); *Thorner v. Sony Comput. Entm’t Am. LLC*, 669 F.3d 1362, 1366 (Fed. Cir. 2012) (“It is likewise not enough that the only embodiments, or all of the embodiments, contain a particular limitation. We do not read limitations from the specification into claims; we do not redefine words. Only the patentee can do that.”).

Moreover, the patents expressly provide that the “minimum necessary contents” of the incoming information “may vary from embodiment to embodiment of the inventive system.” In sum, the Court finds that this description of a particular feature of an exemplary embodiment is not a “clearly express[ed] intent” to redefine the plain claim language to include that feature. *GE Lighting Sols., LLC v. AgiLight, Inc.*, 750 F.3d 1304, 1309–10 (Fed. Cir. 2014). Indeed, the patents contemplate that the inventions cover transactions to authorize access to a secured area or system, which type of transaction surely does not need a field to “identify the price or amount of the transaction.” ’360 Patent col.28 ll.11–15.

The Court rejects Defendants’ proposed “including at least data fields to: 1) identify one or more parties 2) identify the type of transaction, and 3) identify the price or amount of the transaction” limitations and determines that the term has its plain and ordinary meaning without the need for further construction. *See Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1206–07 (Fed. Cir. 2010) (the district court adequately resolved the claim-construction dispute by rejecting a party’s proposed construction and preventing that party’s expert from repeating the rejected construction to the jury).

F. “device”

Disputed Term	Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
“device” <ul style="list-style-type: none"> • ’271 Patent Claims 1, 19 	No construction needed / plain and ordinary meaning.	“a physical apparatus, such as a mobile phone, known to be associated with an individual”

The Parties’ Positions

Plaintiff submits the meaning of “device” is readily accessible without construction. Dkt. No. 148 at 25. Plaintiff further submits Defendants’ proposed construction improperly includes “physical apparatus” and “known to be associated with an individual” limitations when the ’271 Patent includes examples of devices that are neither. *Id.* at 25–27 (citing ’271 Patent Tables 9 and 10 at col.30 l.15 – col.31 l.41, figs.1–18).

In addition to the claims, Plaintiff cites the following intrinsic and extrinsic evidence to support its position: **Intrinsic evidence:** ’271 Patent col.2 l.2, col.8 l.63, col.11 ll.42–43, col.29 l.52, col.30 l.30 – col.31 l.40, tables 9–10, figs.1–18. **Extrinsic evidence:** Traynor Decl. ¶¶ 32–33 (Dkt. No. 148-1 at 11); Merriam-Webster Online Dictionary, “device,” (Plaintiff’s Ex. 25, Dkt. No. 148-27)⁶⁰; Oxforddictionaries.com, “device,” (Plaintiff’s Ex. 28, Dkt. No. 148-30)⁶¹.

⁶⁰ <http://www.merriam-webster.com/dictionary/device>

Defendants respond “device” is “too broad not to construe” as it would otherwise include things such as a “bomb” and a “plan, scheme, or trick.” Dkt. No. 156 at 29–31. And Defendants contend the ’271 Patent distinguishes software, like a web browser, from the physical device on which it runs. Defendants say that “device” does not include software and is limited to an apparatus. *Id.* at 30.

In addition to the claims, Defendants cite the following **intrinsic evidence** to support their position: ’271 Patent col.2 l.2, col.38 ll.46–51.

Plaintiff replies no special meaning was assigned to “device” in the ’271 Patent and therefore that it should mean “what it means in a dictionary.” Dkt. No. 158 at 8 (quoting *Pacid Grp., LLC v. Apple, Inc.*, No. 6:09-cv-143-LED-JDL, 2010 U.S. Dist. LEXIS 70997, at *20 (E.D. Tex. July 15, 2010)). Plaintiff further replies Defendants’ proposed construction would improperly exclude communication methods, such as email, that can be received on a physical apparatus not “known to be associated with an individual” and are therefore agnostic to the physical apparatus. *Id.*

Plaintiff cites further **intrinsic evidence** to support its position: **Intrinsic evidence:** ’271 Patent col.13 ll.4–5.

Analysis

There are two issues in dispute with respect to this term: First, whether a “device” is necessarily a physical apparatus. Second, whether a “device” is “necessarily known to be associated with an individual.” With respect to the first issue, the Court understands that a “device,” as used in the patents, is physical. With respect to the second issue, the Court understands that a device is associated with an individual through a communication address

⁶¹ http://www.Oxforddictionaries.com/us/definition/american_english/device

associated with an individual, and not necessarily through a distinct identifier associated with the device. That is, more than one device, or class of devices, may be associated with an individual through a given address, such as a telephone number, an email address, or an instant-messaging address.

To begin, there can be no legitimate dispute as to whether “device” in the claims includes bombs or schemes. Clearly, the “devices” of the claims and the exemplary embodiments are communication devices.

The Court, however, does not adopt Defendants’ proposed “such as a mobile phone” construction. Adding this example to the construction does not clarify the scope of the claim and gives an improperly narrow impression of the term “device.” The ’271 Patent, for example, lists a myriad of devices in Tables 9 and 10 which may or may not be similar to a mobile phone. ’271 Patent col.30 l.15 – col.32 l.41; *see also*, ’360 Patent col.23 l.16 – col.24 l.49 (Tables 1 and 2, identical to Tables 9 and 10 of the ’271 Patent). Indeed, the patents contemplate that email software, instant messaging software, and fax machines are all “devices.” *Id.* That said, the Court understands that software in and of itself is not a device—in order to potentially be a “device” the software must be running on a physical apparatus to create a means of communication.

The Court also refuses to adopt Defendants’ “known to be associated with an individual” limitation, especially given Defendants’ position on “identifying a second device associated with the account” set forth below. The patents are replete with descriptions of generic devices, such as telephones and fax machines that are associated with the individual through an address. *See, e.g.*, ’271 Patent col.27 ll.49–52 (describing that a “communication session is successfully initiated with a party on a given device and at a given communication address (such as a telephone with a particular telephone number)”), col.30 ll.26–29 (telephone on Public Switched Telephone

Network), col.30 ll.40–43 (fax machine on Public Switched Telephone Network), col.30 ll.29–30 (electronic mail software on Internet Protocol networks), col.30 ll.27–38 (instant messaging software on Internet Protocol networks), col.36 ll.19–67 (“PC-based” instant messaging). Further, Table 3 of the ’271 Patent, which lists the user profiles of an exemplary embodiment, including the user’s devices, does not include an association with a device separate from the communication address [6i]. *Id.* at col.18 l.33 – col.20 l.12. Thus, a user is associated with a land-line telephone (or telephones) via the telephone number, with a computer running email software through the email address, and with a fax machine via the fax number. Thus, the “device” itself does not have to be associated with the user other than through an address such as a telephone number or email address.

Accordingly, the Court construes “device” as follows:

- “device” means “apparatus capable of communication.”

G. “identifying a second device associated with the account” / “identify a second device associated with the account”

Disputed Term	Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
“identifying a second device associated with the account” <ul style="list-style-type: none"> • ’271 Patent Claim 1 	No construction needed / plain and ordinary meaning.	“selecting a second device based on information in the account, the information being specific to the device itself”
“identify a second device associated with the account” <ul style="list-style-type: none"> • ’271 Patent Claim 19 		

Because the parties’ arguments and proposed constructions with respect to these terms are related, the Court addresses the terms together.

The Parties' Positions

Plaintiff submits these terms are readily understood without explanation and therefore should not be construed. Dkt. No. 148 at 27. Plaintiff further submits that Defendants' proposed construction improperly includes "selecting a device," "based on information in the account," and "information being specific to the device itself" limitations. *Id.*

In addition to the claims, Plaintiff cites the following **extrinsic evidence** to support its position: Traynor Decl. ¶¶ 34–35 (Dkt. No. 148-1 at 11–12); Merriam-Webster Online Dictionary: "identify," (Plaintiff's Ex. 24, Dkt. No. 148-26)⁶², "device," (Plaintiff's Ex. 25, Dkt. No. 148-27)⁶³, "associated," (Plaintiff's Ex. 19, Dkt. No. 148-21)⁶⁴, "account," (Plaintiff's Ex. 26, Dkt. No. 148-28)⁶⁵; Oxforddictionaries.com: "identify," (Plaintiff's Ex. 27, Dkt. No. 148-29)⁶⁶, "device," (Plaintiff's Ex. 28, Dkt. No. 148-30)⁶⁷, "associated," (Plaintiff's Ex. 22, Dkt. No. 148-24)⁶⁸, "account," (Plaintiff's Ex. 29, Dkt. No. 148-31)⁶⁹.

Defendants respond the '271 Patent distinguishes between a device and its address, and therefore "device" cannot be construed to include the device's address. Dkt. No. 156 at 31–32. Defendant argues an address, like an email address, may be associated with more than one device and therefore cannot identify a second device. *Id.*

In addition to the claims, Defendants cite the following **intrinsic evidence** to support their position: '271 Patent col.10 ll.42–65, col.12 ll.16–19, col.13 l.66 – col.14 l.3, col.20 ll.5–30, col.26 l.48 – col.27 l.9, col.32 ll.51–55.

⁶² <http://www.merriam-webster.com/dictionary/identify>

⁶³ <http://www.merriam-webster.com/dictionary/device>

⁶⁴ <http://www.merriam-webster.com/dictionary/associated>

⁶⁵ <http://www.merriam-webster.com/dictionary/account>

⁶⁶ http://www.Oxforddictionaries.com/us/definition/american_english/identify

⁶⁷ http://www.Oxforddictionaries.com/us/definition/american_english/device

⁶⁸ http://www.Oxforddictionaries.com/us/definition/american_english/associated

⁶⁹ http://www.Oxforddictionaries.com/us/definition/american_english/account

Plaintiff replies Defendants’ proposal, like Defendants’ proposal for “device,” would improperly exclude the use of the embodiments in which email is the verification medium without any evidentiary support for doing so. Dkt. No. 158 at 9.

Analysis

The main issue with respect to these terms is whether a “device” is identified with information specific to the device, and not just with a communication address such as a telephone number or email address. These terms are not limited to “devices” identified with information specific to the device.

To begin, the Court agrees with Defendants that the patents, in accord with the plain meanings of the terms, distinguish between a device and its address. A telephone is distinct from a telephone number. That does not mean that a telephone must be identifiable via some information distinct from the telephone number. The Court understands the “device” of the Asserted Patents is represented as an amalgamation of various pieces of information in a party’s profile. *See, e.g.*, ’271 Patent col.17 l.33 – col.20 l.12 (Table 3), col.26 l.49 – col.27 l.13. For example, Table 3 of the ’271 Patent, reproduced here as modified for clarity and annotated by the

'271 Patent

TABLE 3

Profiles Database Views

Database View: Parties

Party ID* 6a	Transaction Type* 6b	Party Account* 6c	Party Group ID** 6d	Rule Set ID*** 6e	Demographic Information 6f	Transaction Language 6g	Confirming Value (CV) Type 6h
...

Database View: Profiles

Party ID* 6a	Transaction Type* 6b	Party Account* 6c	Comm. Address* 6i	Media Type 6j	Party Role 6k	Comm. Sequence Group 6l (number)	Comm. Priority 6m (number)	Comm. Sequence Pattern ID**** 6n	Confirming Value (CV)***** 6o
A	...	123	A1	Tel	Confirm	...	...	...	...
A	...	123	A2	Cel	Confirm	...	...	...	...
B	...	456	B1	Email	Notify	...	...	...	...
C	...	789	...	...	Present	...	...	...	...
...

*Index Keys

**Key to Party Groups database view

***Key to Rules databaseview; see Table 2

****Key to Communications Sequence Patterns database view; see Table 5

*****The confirming value

Court, includes the device's media type and communication address. This table shows two devices associated with party A, in yellow. One is associated with telephony media type (Tel) and a first communication address (A1), the other is associated with a different media type (Cel) and a second communication address (A2). The table also shows a device of type "Email" associated with Party B, in green, at communication address B1.

The "second device" of the claims is not necessarily identified using information specific to that device. As stated above, the patents describe associating generic devices, such as telephones, fax machines, and computers running email, with a particular party through a communication address, such as a telephone number, fax number, and email address. Also, Table 3 of the '271 Patent, which lists the party profiles of an exemplary embodiment, including the party's devices, does not list an association with a device separate from the communication address [6i]. '271 Patent col.17 l.33–col.20 l.12. This profile can be searched, for example, to identify the devices by which a request for confirmation that a desired transaction is legitimate can be communicated to a user. *See, id.* at col.26 l.49 – col.27 l.13. Table 3 identifies the index keys for the profile: Party ID 6a, Transaction Type 6b, Party Account 6c, and Communication Address 6i. *Id.* at col.17 l.33 – col.20 l.12. Defendants' proposal would improperly exclude this embodiment. *See C.R. Bard, Inc. v. United States Surgical Corp.*, 388 F.3d 858, 865 (Fed. Cir. 2004) ("[a] construction that excludes a preferred embodiment is rarely, if ever, correct").

The Court declines to rewrite "identify" as "select," as Defendants propose. Indeed, Defendants have not presented any argument or evidence to do so.

Accordingly, the Court rejects Defendants' proposed "selecting" and "the information being specific to the device itself" limitations and determines that these terms have their plain and ordinary meaning and do not need further construction. *See Finjan, Inc. v. Secure Computing*

Corp., 626 F.3d 1197, 1206–07 (Fed. Cir. 2010) (the district court adequately resolved the claim-construction dispute by rejecting a party’s proposed construction and preventing that party’s expert from repeating the rejected construction to the jury).

H. “[over a] network”

Disputed Term	Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
“[over a] network” <ul style="list-style-type: none"> ’271 Patent Claims 1, 19 	No construction needed / plain and ordinary meaning.	Indefinite under 35 U.S.C. § 112(b)

The Parties’ Positions

Plaintiff submits the meaning of this term is clear without construction. Dkt. No. 148 at 28. In the context of Claim 1 and 19 of the ’271 Patent, Plaintiff contends, each reference to “over a network” refers to any network, whether or not the same network. *Id.* Plaintiff argues Defendants’ cannot prove that this term renders any claim indefinite as they did not provide any evidence of such. *Id.*

In addition to the claims, Plaintiff cites the following **extrinsic evidence** to support its position: Traynor Decl. ¶¶ 36–37 (Dkt. No. 148-1 at 12); Merriam-Webster Online Dictionary: “processing,” (Plaintiff’s Ex. 12, Dkt. No. 148-14)⁷⁰, “transaction,” (Plaintiff’s Ex. 3, Dkt. No. 148-5)⁷¹; Oxforddictionaries.com: “processing,” (Plaintiff’s Ex. 14, Dkt. No. 148-16)⁷², “transaction,” (Plaintiff’s Ex. 23, Dkt. No. 148-25)⁷³.

⁷⁰ <http://www.merriam-webster.com/dictionary/processing>

⁷¹ <http://www.merriam-webster.com/dictionary/transaction>

⁷² http://www.oxforddictionaries.com/us/definition/american_english/process?q=processing#process__13

⁷³ http://www.Oxforddictionaries.com/us/definition/american_english/transaction

Defendants respond because the term “over a network” appears multiple times in a given claim, it is “unclear how many networks are in play” and therefore the term renders claims indefinite. Dkt. No. 156 at 33–34.

Plaintiff replies the ’271 Patent is clear that the claimed inventions may utilize a common network or dedicated communication links. Dkt. No. 158 at 14.

Plaintiff cites further **intrinsic evidence** to support its position: ’271 Patent col.30 l.16 – col.31 l.40.

Analysis

The sole dispute with respect to this term is whether multiple mentions of “a network” in a given claim renders the claim indefinite. It does not.

The recitations of “a network” in the claims encompass both different networks and the same network—this goes to breadth and not to definiteness. Claim 1 of the ’271 Patent, reproduced here and annotated by the Court, illustrates the multiple recitations of “a network” in a single claim. In each instance, the term is used to specify how a particular communication (receiving or transmitting) is accomplished—it is over *a* network. The

’271 Patent

1. A method for authenticating a device to be associated with an account, the method comprising:
receiving at a server, over a network, an account access request from a first device;
identifying a second device associated with the account;
transmitting to the second device, over a network, a verification message associated with the account access request;
receiving, over a network, a response related to the verification message;
verifying, using a processor, the authenticity of the account access request based on the response; and
authenticating the first device, such that one or more subsequent requests to access the account from the first device are granted without communicating with the second device.

patents describe a myriad of networks. *See, e.g.*, ’271 Patent col.30 l.17 – col.32 l.41 (Tables 9 and 10, listing Public Switched Telephone Networks, Internet Protocol Networks, private data networks, public data networks, IP fax, etc.). Thus, the patents contemplate communication over various networks. *See also*, ’271 Patent fig.1 (depicting communication over PSTN, Data Net, P

net*, Paging, Cellular). The Court understands the plain meaning of the claim language to allow that the communications may be over the same network or different networks, so long as the communications are over *a* network. Defendants do not cite any authority or provide any evidence that the scope of a claim is somehow rendered uncertain merely by multiple recitations of a term without stating whether each recitation refers to the same limitation or distinct limitations. Indeed, the claims here were specifically drafted to be ambivalent on this issue—thus the use of “a network” rather than “a distinct network” or “the network.”

Accordingly, Defendants have failed to establish that “over a network” renders any claim indefinite.

V. CONCLUSION

The Court adopts the constructions above for the disputed and agreed terms of the Asserted Patents. The Court further finds that Claims 44, 45, 48, and 60 of the '360 Patent are invalid as indefinite. Furthermore, the parties should ensure that all testimony that relates to the terms addressed in this Order is constrained by the Court's reasoning. However, in the presence of the jury the parties should not expressly or implicitly refer to each other's claim construction positions and should not expressly refer to any portion of this Order that is not an actual construction adopted by the Court. The references to the claim construction process should be limited to informing the jury of the constructions adopted by the Court.

SIGNED this 18th day of September, 2016.


ROY S. PAYNE
UNITED STATES MAGISTRATE JUDGE